According to <u>AMSAT</u>, <u>ARISSat-1 stopped transmitting</u> on the morning of January 4. It is believed that the satellite re-entered the Earth's atmosphere around 0700 UTC (+/- three hours) and was destroyed soon after. Telemetry reports showed that the temperature aboard ARISSat-1 had been rising as the atmospheric drag began to affect the satellite The predicted decay location is an open part of the South Atlantic, well west of Angola.

The last telemetry reports indicated that the internal temperature had topped 167 degrees Fahrenheit and was rising rapidly. Konstantin Vladimirovich, RN3ZF, sent a reception report of a pass at 0842 UTC and stated, "The telemetry was absent, voice messages were not legible, very silent and interrupted. Most likely, I saw the last minutes in the life of the satellite." The last full telemetry captured was received from ground stations as the satellite passed over Japan at 0602 UTC on January 4.

ARISSat-1 was <u>deployed</u> from the International Space Station on August 3, 2011 during EVA-29 on by Cosmonaut/Flight Engineers Sergei Volkov, RU3DIS, and Alexander Samokutyaev. The satellite carried a student experiment from Kursk State University in



Sergei Volvok, RU3DIS, and Alexander Samokutyaev deployed ARISSat1-1 from the ISS on August 3, 2011. [Screenshot courtesy of NASA TV]

Russia that measured atmospheric density. Students from around the world provided the voices for the FM voice announcements.

AMSAT President Barry Baines, WD4ASW, said that ARISSat-1 marked a new type of satellite that captured the attention of the national space agencies around the world. "With ARISSat-1, we have we have been able to design, launch, and operate a unique educational opportunity," he explained. "By designing an educational mission aligned with NASA's Science, Technology, Engineering and Mathematics goals, radio amateurs around the world have been able enjoy a new satellite in orbit."

ARISSat-1 achieved several "firsts" for Amateur Radio in space, including the first flight test of the AMSAT Software Defined Transponder, which included an FM voice downlink cycling between student messages, spoken telemetry and SSTV; a 16 kHz bandwidth linear transponder; a CW beacon carrying telemetry and call signs of radio amateurs (noting their significant contributions to Amateur Radio in space) and a robust, forward-error-corrected 1kbps BPSK digital downlink carrying satellite telemetry and Kursk experiment telemetry.